

REMARKS

This Amendment, filed in reply to the Office Action dated January 10, 2006, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-39 remain pending the application. Claims 34, 36, 38 and 39 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 1-4, 16-19, 31, 35 and 37 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over IBM Technical Disclosure Bulletin ("Selective Area Image Compression," Volume 29, Issue 12, page number 5356-5357, May 1, 1987, referred to as "IBM Technical Disclosure") and Wang et al. (U.S.P. 4,598,369). Claims 5, 6, 20 and 21 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over "IBM TECHNICAL DISCLOSURE" as modified by Wang et al. and further in view of Kuni et al. (JP 405272952A). Claims 7, 8, 22 and 23 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over "IBM TECHNICAL DISCLOSURE" as modified by Wang et al. and further in view of Nakajima et al. (U.S.P. 4,944,189). Claims 9-12, 14, 15, 24-27, 29 and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over "IBM TECHNICAL DISCLOSURE" as modified by Wang et al. and further in view of Hama et al. (U.S.P. 4,751,507). Claims 13 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over "IBM TECHNICAL DISCLOSURE" as modified by Wang et al. and Kuni et al. and further in view of Hama et al. Claims 32 and 33 have been deemed allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant respectfully submits the following arguments in traversal of the prior art rejections..

With regard to the Section 112 rejection, the Examiner admits that the specification describes distance and angle measurements between two points. Applicant submits that claims 34, 36, 38 and 39 do not describe measurement relative to a single point as the Examiner contends, but that the measurement is made relative to a measurement point, in relation to an object of the image which is a second point of reference generally described in the specification. Therefore, the claims as pending are supported adequately by the disclosure. To expedite prosecution of this case, Applicant hereinabove amends claims 34, 36, and 38-39 to describe a second measurement point, which the Examiner concedes is supported by the disclosure and should not raise new issues. If the amendment is not entered, Applicant would maintain that the measurement of angle and distance of the measurement point in relation to the object of the radiation image is adequately supported by the specification.

With regard to the prior art rejection of independent claim 1 over the primary combination of the IBM Technical Disclosure and Wang, the Examiner offers a few points in rebuttal to previously submitted arguments. Applicant respectfully responds as follows.

The Examiner's rejection and response fails to indicate where the references teach a measuring point designated for measuring a **geometric feature** of an object included in the radiation image. The Examiner acknowledges that at most, the IBM Technical Disclosure teaches setting a boundary region in an image. This boundary comprises x, y coordinates to set the corners of a rectangular shaped region of interest. This is clear from the Figure of the IBM Technical Disclosure. These x, y coordinates do not indicate a measure of any geometric feature.

The Examiner's rejection appears to suggest that the geometric feature can be measured by setting the x,y coordinates so that smaller and smaller regions of the image can be isolated,

i.e. that the x, y coordinate be modified to isolate only the “fracture” indicated by the Figure. This is not proper because nothing in the IBM Technical Disclosure suggests that this be done. Moreover, the x,y points would not necessarily provide any “measurement” of the fracture. At best, the x,y points would indicate the coordinate of the upper left coordinate and the lower right coordinate of the box containing the fracture. There is no calculation or any measurement based on these x,y coordinates.

Additionally, as previously discussed, the type of close-up framing would cause the image to lose any surrounding information. This is because the areas outside of the framed region is processed in a destructive manner such that it cannot be recovered in its original form for analysis. Isolating only the fracture would make it burdensome, if not impossible, for a physician to subsequently determine even where the fracture is located since the surrounding areas would be destructively processed.

The Examiner’s own rebuttal would suggest that the region of interest cannot be set to correspond to be a measuring point for a geometric feature. At page 3, the Examiner observes that individual physicians will set up the coordinates in different ways, some areas being larger or smaller. The variation in how the x,y boundary region can be set clearly indicates that the x, y boundary cannot set a measurement point for measuring a geometric feature.

Moreover, the Examiner continues to concede that the IBM Technical Disclosure does not store the positional information of the reference point and the radiation image. The Examiner cites Wang to make up for this deficiency. Applicant would note that the Examiner has not rebutted prior arguments on why the IBM Technical Disclosure and Wang cannot be combined. Generally, the IBM Technical Disclosure relies on isolating **localized** regions of an

image to save on processing resources for the image. In direct contrast, Wang relies on **global** image mapping including at least two points of interest which occur in two different planes. The approach in each reference teaches away from its combination with the other.

The Examiner contends it would be obvious to combine the IBM Technical Disclosure with Wang in order to image multiple planes. In order for the multiple plane analysis to occur, the imaging cannot be isolated to only individual points of interest because the mapping and alignment of multiple images, as required by Wang, cannot occur. Stated differently, Wang would not be able to function using the extremely close feature isolation that the Examiner relies upon as teaching a "geometric feature." Therefore, to apply the multiple plane analysis available in Wang, this would eradicate any purported provision of a measuring point of a geometric feature in the IBM Technical Disclosure.

All of the above points should clearly indicate that the rejection of claim 1 is based on improper hindsight reconstruction. Claim 16 recites analogous though not necessarily coextensive features and is patentable for the reasons set forth for claim 1. The remaining claims are patentable based on their dependency. The additional references of Kuni, Nakajima, and Hama do not make up for the above deficiencies.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.116
U.S. Application No. 09/539,409

Attorney Docket No. Q56564

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.


Respectfully submitted,

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